

<b>APPENDIX G WILD AND SCENIC RIVERS EVALUATION.....</b>	<b>G-1</b>
INTRODUCTION.....	G-1
PURPOSE AND NEED FOR ACTION.....	G-2
<i>Historical Summary</i> .....	G-3
<i>Current Conditions</i> .....	G-4
BENCHMARK ANALYSIS SUMMARY .....	G-4
<i>Inventory and Evaluation Process</i> .....	G-4
<i>Results of Inventory and Evaluation</i> .....	G-5
DEMAND ASSESSMENT.....	G-6
<i>Comprehensive River Management Plans</i> .....	G-6
ORGANIZATION OF THIS REPORT .....	G-6
<i>Cheyenne River (Nebraska National Forest)</i> .....	G-6
Alternatives.....	G-7
Suitability.....	G-7
<i>Little Missouri (Dakota Prairie Grasslands)</i> .....	G-9
Alternatives.....	G-12
Suitability.....	G-13
<i>Little Missouri (Theodore Roosevelt National Park)</i> .....	G-17
Alternatives.....	G-18
Suitability.....	G-19
<i>Middle Loup (Nebraska National Forest)</i> .....	G-28
Alternatives.....	G-29
Suitability.....	G-29
<i>Rapid Creek (Nebraska National Forest)</i> .....	G-31
Alternatives.....	G-32
Suitability.....	G-32
<i>Sheyenne (Dakota Prairie Grasslands)</i> .....	G-33
Alternatives.....	G-35
Suitability.....	G-35



## Appendix G Wild and Scenic Rivers Evaluation

### Introduction

The National Wild and Scenic Rivers Act of 1968 (P.L. 90-542; 16 U.S.C. 1271-1287, as amended) is designed to preserve certain rivers and streams with outstanding natural, heritage, or recreational features in a free-flowing condition for the enjoyment of current and future generations. At the end of 1997, the National Wild and Scenic Rivers System (NWSRS) included 154 streams totaling 10,759 miles. There are no designated rivers or streams within or bordering the Northern Great Plains planning units.

The term "river," as used in this appendix, is based on language in the 1968 act. "River" does not confer any meaning about water quality or quantity. On the Northern Great Plains, "river" applies to rivers, creeks, or intermittent streams that are free-flowing (without impoundments).

Free-flowing rivers and streams may be designated by the U.S. Congress (usually following a study by a federal agency, such as the USDA-Forest Service) or by the Secretary of the Interior upon application of the governor of a state or states through which the river flows.

Each stream is administered by either a federal or state agency. Designation may include all or part of a river and may include tributaries. A corridor about one-half-mile wide (one-quarter mile either side of a stream) is usually included within the designation boundary to protect related natural, heritage, and recreational values.

Designated rivers and streams are classified as wild, scenic, or recreational. The Wild and Scenic Rivers Act defines these terms as follows:

- **Wild Rivers:** Rivers or sections of rivers free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.
- **Scenic Rivers:** Rivers or sections of rivers free of impoundments, with shorelines or watersheds still largely undeveloped, but accessible in places by roads.
- **Recreational Rivers:** Rivers or sections of rivers readily accessible by road or railroad, that may have some development along their shoreline and that may have undergone some impoundments or diversions in the past.

Landownership within designated boundaries can be, and often is, a combination of federal, state, and private. If designation of any rivers were to occur, and if private land lies within the corridors, the Forest Service would consider acquisition of these lands only when the owner is willing to sell or exchange land for the appraised value. The federal government is limited to acquiring no more than 100 acres per mile of stream of private lands within a designated stream corridor. In fact, agencies are not required, in any case, to acquire any private land. In addition, recreational, agricultural, and residential uses may continue. Recreational users are cautioned to be aware of and respect private property rights. Existing water rights and existing jurisdiction

of states and the United States over waters as determined by established principles of law are not affected by designation.

Designation neither implies nor gives the government control of private lands within the river corridor. Although Congress could include private lands within the boundaries of the designated river area, management restrictions would apply only to public lands.

The Federal Energy Regulatory Commission is prohibited from licensing projects on or directly affecting designated rivers. Other federal agencies cannot assist by loan, grant, license, or any other manner the construction of any water-resource project (such as a dam, water diversion, channel, or rip-rap) that would have a direct and adverse effect on river values.

A four-step process is required before a river can be included in the NWSRS. The first step is an evaluation of a river's "eligibility." This evaluation must consider the area within one-quarter mile of the high water mark on both sides of a river and other features outside the corridor, if their inclusion is essential for the protection of the river's outstandingly remarkable values.

The second step is to classify eligible segments of the river as potential wild, scenic, or recreational segments based on specific criteria that help determine the appropriate potential classification.

The third step is to evaluate the eligible river for "suitability." This evaluation considers possible Congressional inclusion of the river in the NWSRS in terms of social and economic values, effects on other resources and effects on private lands and other uses of the area.

Finally, an evaluation is made as to whether or not a recommendation for inclusion of segments of the river should be made to Congress. When Congress does designate a river for inclusion, a final boundary for the corridor is established, and a management plan is developed.

Beginning in 1996, all free-flowing rivers and streams within or immediately bordering National Forest Service System lands connected to the Northern Great Plains Plans Revision process were screened to determine which should be evaluated for possible eligibility to the NWSRS. Five rivers and streams (a total of 155.35 miles) within or bordering National Forest System lands were determined to be potentially eligible and were, therefore, evaluated further. In addition, the National Park Service determined that 27.7 miles of the Little Missouri River within Theodore Roosevelt National Park were eligible for possible inclusion in the NWSRS.

---

## **Purpose and Need for Action**

The Wild and Scenic Rivers Act, at Section 5(d), states:

In all planning for the use and development of water and related land resources, consideration shall be given for all federal agencies involved to potential national wild, scenic and recreational river areas. All river basin and project plan reports submitted to Congress shall consider and discuss any such potentials. The Secretary of the Interior and the Secretary of Agriculture shall make specific studies and investigations to determine which additional wild, scenic and recreational river areas within the United States shall be evaluated in planning reports by all federal agencies as potential alternative uses of the water and related land resources involved.

The *Forest Service Land and Resource Management Planning Handbook* (FSH 1909.12) found at Section 8.01--"Authority," states:

The purpose and authority for study of wild and scenic rivers are in the Wild and Scenic Rivers Act of October 1, 1968, as amended. Revised USDA-USDI Guidelines for Eligibility, Classification, and Management of River Areas dated September 7, 1982, supplements the act. The text of the act and guidelines are set forth in Chapter 9 ... Treatment may vary but, except as noted in this section, the planning teams should evaluate each river to verify that it meets the eligibility criteria specified in sections 1(b) and 2(b) of the Wild and Scenic Rivers Act. Document the finding of eligibility or non-eligibility and the river's potential classification in the forest plan.

Beyond this point, there is some latitude in treatment of eligible rivers. The preferred process is to proceed with determining suitability by completing a river study in the draft forest plan. An alternative is to delay the suitability determination on eligible rivers until a subsequent separate study is carried out. If this latter alternative is used, the forest plan must provide for protection of the river area until a decision is made as to the future use of the river and adjacent lands. Unless the study process would be unduly delayed, subsequent study of eligible rivers may be coordinated with a general revision of the forest plan.

## Historical Summary

The Custer National Forest identified the Little Missouri River as meeting the eligibility criteria for possible inclusion into the Wild and Scenic Rivers System during development of the first management plan in 1987. No suitability study was completed.

The Medicine Bow National Forest did not identify any rivers as being eligible on the Thunder Basin National Grassland during their first planning effort completed in 1985.

The 1984 Nebraska National Forest Land and Resource Management Plan did not identify any rivers as being eligible for possible inclusion into the Wild and Scenic River System. The review of river eligibility focused primarily on the lack of scenic quality and shortness of river length flowing through the lands administered by the Nebraska National Forest. The rivers reviewed were:

- Niobrara: approximately one-half mile.
- Snake: approximately one mile.
- Dismal: approximately three miles.
- Middle Loup: approximately 2 miles.
- Cheyenne: approximately 14 miles.
- White: approximately 4 miles.

In 1992, the Theodore Roosevelt National Park (TRNP) determined that the entire segment of the Little Missouri River (27.2 miles) within the boundaries of the three TRNP units were eligible for possible designation. The identified outstanding remarkable values of the Little Missouri River within the three units include scenic, recreational, geological, fisheries, historic, cultural, and ecological features that are exemplary of these resource values in the Northern Great Plains region. The three units and corresponding miles of river are listed below:

- South Unit: 11.5 miles.
- Elkhorn Unit: 1 mile.
- North Unit: 14.7 miles.

## **Current Conditions**

The Little Missouri River in North Dakota is currently the only river in the planning area specifically being managed to preserve its characteristics as a potential Wild and Scenic River. There are no designated Wild and Scenic Rivers within the administrative boundaries of any of the units involved in the Northern Great Plains Plans Revision. Within the Northern Great Plains, segments of two rivers have been included in the Wild and Scenic River System: the Missouri and the Niobrara. Several segments of the Missouri River have been designated, including a segment in Montana and other segments in Nebraska and South Dakota. A segment of the Niobrara River, southeast of Valentine, Nebraska, has also been designated.

---

## **Benchmark Analysis Summary**

### **Inventory and Evaluation Process**

The Nebraska National Forest and Thunder Basin National Grassland conducted a systematic review of all sixth-level watersheds using Geographic Information Systems (GIS). The GIS computer program mapped all the sixth-level watersheds for these units on a scale of 1:126,720. An interdisciplinary team on each district then reviewed the major stream within each sixth-level watershed for free-flowing characteristics and evaluated the free-flowing segments using Forest Service Region 2 criteria to determine if segments had any outstandingly remarkable characteristics. Eligibility-determination criteria indicating an outstanding rating could include scenic, recreation, geology, fisheries, wildlife, prehistoric, historic, and ecological/vegetative.

The Custer National Forest reviewed all intermittent and perennial streams. The evaluation of these streams then followed the same process as the other units. The process for assessing outstandingly remarkable values for every criteria for each stream evaluated is on file at the Forest Supervisor's Office in Chadron, Nebraska. Values were judged “outstandingly remarkable” compared to other streams on a regional, state, or national level. For streams found eligible, an estimate of potential classification (wild, scenic, or recreational) was made.

## Results of Inventory and Evaluation

The table below displays the results of the inventory of streams for Wild and Scenic River eligibility.

**Table G-1. Wild and Scenic River Inventory.**

Planning Unit	River	Potential Classification	Miles	Outstandingly Remarkable Features
<b>Dakota Prairie Grasslands</b>				
Little Missouri National Grassland	Little Missouri	Wild	3.3	Scenery, fisheries and wildlife
		Scenic	88.9	
		Recreational	13.7	
Sheyenne National Grassland	Sheyenne	Recreational	10.2	Plant species, fisheries, and ecological, archeological and hydrologic features
<b>Nebraska National Forest Units</b>				
Bessey Ranger District	Middle Loup	Recreational	.5	Bessey Nursery and Bessey Recreation Complex
Buffalo Gap National Grassland/Fall River	Cheyenne	Scenic	8.6	Fisheries, wildlife, scenery, and recreation
	Rapid Creek	Scenic	1.7	Fisheries and wildlife

**Table G-2. Wild and Scenic River Inventory for the Theodore Roosevelt National Park.**

Planning Unit	River	Potential Classification	Miles	Values
South Unit	Little Missouri	Recreational	1.5	Scenic, recreational, geological, fisheries, historic, cultural, and ecological
		Scenic	5.8	
		Wild	4.2	
Elkhorn Unit	Little Missouri	Scenic	1.0	Scenic, recreational, geological, fisheries, historic, cultural, and ecological
North Unit	Little Missouri	Scenic	4.0	Scenic, recreational, geological, fisheries, historic, cultural, and ecological
		Wild	10.7	

---

## Demand Assessment

Public comments received during the formal public scoping period range from support for designating rivers as part of the National Wild and Scenic River System to opposition for any designations. The major concern expressed by those opposing designation is that additional controls and restrictions may be placed on private landowners along a designated river. There were several comments in favor of the existing North Dakota state designation of the Little Missouri as a state scenic river.

During the formal public scoping period, Theodore Roosevelt National Park received 522 pre-printed postcards and 26 letters asking for wild or scenic status with the TRNP boundaries. Of the 522 pre-printed postcards, 274 contained additional comments written by the sender. The TRNP did not receive any correspondence asking that the agency not pursue designation of wild or scenic river status.

During the time the DEIS was available for public comments both Theodore Roosevelt National and the USFS Northern Great Plains planning office at Chadron, Nebraska received comments that specifically addressed the wild and scenic designation for the Little Missouri River within the park boundaries. Theodore Roosevelt National Park received 144 comments during the public input period. Of these, 142 comments were in favor of designation and 2 were opposed. The Chadron USFS office received 218 comments that specifically addressed wild and scenic designation within the park boundaries. Of these 218 comments, 169 expressed support for the preferred alternative and designation and 49 expressed comments against pursuing designation within the park boundaries. A total of 362 comments was received by both agencies with 86% in favor of designation within the park and 14% opposed.

No comments were received that specifically supported designating the Middle Loup River in Nebraska, although there were many comments opposing a national designation.

## Comprehensive River Management Plans

Any river or river segment designated as wild, scenic, or recreational under the Wild and Scenic River Act will require a comprehensive river management plan. These plans will be written within three years of the river's or river segment's designation in accordance with the Wild and Scenic River Act, Section 3 (D) (1) and Public Law 90-542, as amended.

---

## Organization of this Report

Each stream evaluation is divided into the following sections: description, eligibility, potential classification, alternatives, and suitability.

### Cheyenne River (Nebraska National Forest)

**Description:** Located on both the Fall River and Wall Ranger Districts of the Buffalo Gap National Grassland, about eight miles of the Cheyenne River have been determined as eligible under the scenic classification. The Cheyenne River rises on the eastern plains of Wyoming and empties into the Missouri River in central South Dakota. Generally, the Cheyenne River is a braided, meandering prairie river, with one main channel and numerous side channels which



form sandbars and narrow, vegetated islands. It is characterized by frequent oxbows and high levels of suspended solids. A number of benches rise from the main stream and provide an array of vegetative communities. Some of the major communities include aquatic vegetation along the sandbars, a riparian cottonwood woodland, and grasses, such as prairie sandreed, switchgrass, and western wheatgrass along the river benches.

**Eligibility:** The eligible section of this river is located from Section 27, Township 4 South, Range 10 East to Section 21, Township 4 South, Range 11 East. The Cheyenne River (206 miles) is identified on the Nationwide River Inventory as having outstanding wild, scenic, or recreation potential. Except for the portion of the river flowing through the Buffalo Gap National Grassland, the river has not been studied for eligibility. Some areas along this river may be eligible under other authority or ownership; however, it is outside the scope of the U.S. Forest Service to analyze such river sections for inclusion.

**Potential Classification:** Approximately eight miles of the Cheyenne River that either borders or flows fully within lands administered by the U.S. Forest Service were inventoried. These river sections hold the potential for classification as scenic. Outstandingly remarkable features include significant fisheries and wildlife resources, scenic qualities, and recreational values.

## Alternatives

- Alternative 1: Not recommended for designation.
- Alternative 2: Not recommended for designation.
- DEIS Alternative 3: Not recommended for designation.
- FEIS Alternative 3: Not recommended for designation.
- Alternative 4: Recommended for a designation with a scenic classification.
- Alternative 5: Recommended for a designation with a recreational classification.

## Suitability

### **Suitability Factor Number 1: Characteristics that do or do not make the area a worthy addition to the National Wild and Scenic River System.**

This river is highly scenic. A number of visually appealing habitats are visible from the river, including juniper breaks, cottonwood floodplains, and badlands topography. There is opportunity for increased recreational use of the river, including canoeing in a relatively pristine setting. The stream flow is somewhat controlled, since Angostura Reservoir lies upstream. Some fences do cross the river corridor, as does State Highway 44 at Section 26, Township 4 South, Range 10 East. The old Highway 44 bridge also crosses the river corridor and, although it no longer transports traffic, it does have some historic and scenic value. Some utility lines and the village of Red Shirt may be visible from some locations along the river.

**Suitability Factor Number 2: Current status of landownership and use in the area including the amount of private land and the uses of such land.**

The north side of this stretch of river is administered by the USDA-Forest Service. The south side of this stretch of river is administered by the Bureau of Indian Affairs (BIA). Management of this stretch of river would require some coordination between the two agencies. The primary use along this stretch of river is livestock grazing. Recreation along the river includes canoeing, hunting, hiking, nature study, and other associated outdoors activities.

**Suitability Factor Number 3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed by designation and values that would be foreclosed or diminished if the area is not protected as part of the National Wild and Scenic River System.**

**Transportation**

Transportation either along or across this section of the Cheyenne River would not be altered based on designation. Furthermore, nondesignation probably would not lead to any change in transportation along or across this section of the Cheyenne River.

**Water**

The State of South Dakota has determined that the Cheyenne River does not support its assigned beneficial uses due to high conductivity and salinity/total dissolved solids/chlorides. Designation would not alter this basic condition of the river's water quality.

**Minerals**

Sand, specialty sand, gravel, Pierre shale, and gemstone resources are known to exist in this area. Placer gold mining has occurred along the Cheyenne river. The area has potential for uranium, molybdenum, selenium, and vanadium. Leasable minerals potential is low. The federal government owns most of the subsurface mineral rights along this stretch of the river. Approximately one mile of the river's subsurface minerals are controlled by other interests. No Within the scenic corridor segment, surface occupancy for extracting federal leasable minerals would require meeting a High Scenic Integrity Objective.

**Timber**

No commercial timber cutting or firewood collection has been or would be allowed along this stretch of river.

**Fisheries and Wildlife**

Three fish species, the flathead chub, plains top minnow, and the sturgeon chub, occur in the river. In addition, the spiny softshell turtle also occurs within the river corridor. These are considered species of concern by the Forest Service. Designation likely would not have any effect on these or other fish and wildlife species.

**Recreation, Scenic, and Subsistence**

The continued scenic qualities of the river would be maintained by designation. Designation would bring a higher public profile to the river, which might increase recreational use. If use were to increase markedly, the Forest Service would examine the possibility of providing a canoe launch, as well as a primitive campground.

### **Effects of Nondesignation**

A new railway line has been proposed by the Dakota, Minnesota, and Eastern Railroad (DM&E). The DM&E Powder River Basin Expansion Project DEIS considers 3 alternatives and variations on each alternative including one alternative alignment along this segment of the Cheyenne river. In the event of nondesignation there is a possibility the scenic and recreational backcountry characteristics of this stretch of the river could be degraded should the proposed railway go through this National Forest Service river corridor.

### **Suitability Factor Number 4: Public, state, and local government interests.**

This stretch of river provides access to sacred American Indian ceremonial sites. The Sierra Club publicly supports designation of this stretch of river. State and local government agencies have not supported or opposed designation.

### **Suitability Factor Number 5: Estimated costs of land acquisition and management as a Wild and Scenic River.**

Signs would be installed to identify this stretch of river as part of the Wild and Scenic River System. In addition, a river management plan would be prepared. Estimated costs for installing interpretive signs on the north side of this section of river are \$3,000. Estimated costs for preparing a river management plan are \$10,000. No land acquisitions along or near this stretch of the river are planned.

## **Little Missouri (Dakota Prairie Grasslands)**

**Description:** More than 10,000 years ago, as the last major glacier retreated to the north, the Little Missouri River region underwent significant alteration, directing the flow of the Little Missouri River into the larger Missouri River. The Little Missouri River's general flow is north; it arises in Wyoming and eventually empties into Lake Sakakawea northwest of Killdeer, North Dakota. The river's level fluctuates seasonally, with highest runoffs occurring in spring and lowest flows occurring during the typically hot summers of western North Dakota.

The Little Missouri River enters the administrative boundary of the Little Missouri National Grassland on the southern edge of Section 36, Township 133 South, Range 105 West and leaves the national grassland on the south side of Section 32, Township 149 North, Range 96 West. About 240 miles of the river meanders through the administrative boundary of the Little Missouri National Grassland, with about 134 miles within or forming a border with lands actually administered by the Little Missouri National Grassland of the Dakota Prairie Grasslands. The river also runs through both the North and South Units of the Theodore Roosevelt National Park, as well as through a number of parcels of land owned by the State of North Dakota.

The Little Missouri is one of the longest, unimpeded, free-flowing rivers remaining in the lower 48 states. It is outstandingly remarkable in many significant ways and certainly unique in others. Its channelization has helped sculpt the picturesque Little Missouri Badlands, with vertical erosion exposing up to 300 feet of soils and rock formations. The river runs through eight different rock formations: the Cretaceous Pierre, Fox Hills, and Hell Creek Formations and the Tertiary Ludlow, Cannonball, Slope, Bullion Creek, and Sentinel Butte Formations. These formations become progressively younger to the north and the east. The highly dissected valley landscape has high relief along much of its length.

The Little Missouri River drains the Little Missouri Badlands, an area of sometimes stark, eroded and dissected topography. The badlands are sparsely settled and significant native cover remains.

Zoological resources are also significant. The area is of very high value to upland game and nongame wildlife. The stream and adjacent riparian zone provides habitat for beaver, wild turkey, deer, great blue herons, and turkey vultures.

Less than half the Little Missouri River's floodplain is hayed or plowed, with potential habitat remaining for lowland forest, pioneer riparian communities, and sagebrush shrubland.

Campsites, lithic chipping stations, cultural material scatters, and eagle catchment pits point to many centuries of historic or prehistoric use by American Indians and their ancestors. During the 1880s, cattlemen ran large herds of cattle along the river. The Little Missouri Badlands were quickly divided into ranches. Several historic figures resided in the area, at least for a time, including Theodore Roosevelt and French nobleman, Marquis de Mores.

Many fossil sites have been recorded along the river, and many more will likely be discovered. Invertebrate, vertebrate, and plant fossils have been found in the Cretaceous and Paleocene formations along the waterway.

Some sport fishing occurs along the Little Missouri River, especially for channel catfish. The river is a critical spawning area for the channel catfish population found in Lake Sakakawea. The pallid sturgeon, a federally listed endangered species, and the sturgeon chub, a candidate species for the federal threatened and endangered species list, likely are present in the Little Missouri River. Six state rare species have been collected, in limited numbers, from the river.

The river is considered recreationally significant to the state. Recreation includes sight-seeing, canoeing, camping, and fishing. The river offers solitude and remote, rugged scenery. The State of North Dakota has designated the entire length of the river in North Dakota as a State Scenic River.

During most years the Little Missouri River becomes intermittent during the summer months. It has remained in a predominately natural state, is highly turbid, and carries a large sediment load. It provides a unique ecosystem for various forms of indigenous aquatic life, which are dependent on these seemingly adverse water-quality conditions.

The forest resource along the river is important as a feeding and wintering area for wildlife, as well as livestock. The lack of cottonwood regeneration is a concern along the entire length of the river corridor.

**Eligibility:** The Little Missouri River enters the administrative boundary of the Little Missouri National Grassland on the southern edge of Section 36, Township 133 South, Range 105 West and leaves the national grassland on the south side of Section 32, Township 149 North, Range 96 West. About 240 miles of the river meanders through the administrative boundary of the Little Missouri National Grassland, with about 134 miles within or forming a border with lands actually administered by the Little Missouri National Grassland of the Dakota Prairie Grasslands (lands within the administrative boundary of the Little Missouri National Grassland include intermingled state and private lands, as well as public lands under federal management).

The river also runs through both the North and South Units of the Theodore Roosevelt National Park, as well as through a number of parcels of land owned by the State of North Dakota.

Although the entire river, as it flows through the boundaries of the Little Missouri National Grassland, was determined eligible, not all the river was classified and included in alternatives. Based on strong public and local government input against designating any portions of the river flowing totally through private land, those portions of the river were declared unsuitable for inclusion into the National Wild and Scenic River System, at this time.

Locations of and potential classifications for eligible segments are shown by ranger district below:

#### **McKenzie Ranger District**

Wild	T149N, R96W, Section 31
Recreational	T147N, R98W, Sections 1-4, 6, 8-10
Scenic	T147N, R99W, Sections 3 and 4
Scenic	T147N, R100W, Section 30 T147N, R101W, Sections 22, 24-26, 28,32 T147N, R102W, Section 25
Scenic	T146N, R102W, Sections 1, 12-14
Recreational	T146N, R102W, Sections 22, 24, 26
Scenic	T145N, R102W, Section 26

#### **Medora Ranger District**

Scenic	T144N, R102W, Sections 4-6, 8 and 9
Scenic	T144N, R102W, Sections 21, 28
Scenic	T143N, R102W, Sections 4, 8 and 9
Scenic	T143N, R102W, Section 27
Scenic	T143N, R102W, Section 35
Scenic	T142N, R102W, Section 1
Scenic	T142N, R102W, Sections 11-14 and 23
Recreational	T141N, R102W, Section 1
Scenic	T140N, R102W, Section 33
Scenic	T139N, R102W, Sections 4 and 10
Scenic	T139N, R102W, Sections 22 and 23
Scenic	T138N, R102W, Sections 7 and 8
Scenic	T138N, R102W, Section 18
Scenic	T138N, R102W, Sections 24 and 31; T137N, R102W, Sections 4-6, 8-11, 13-15, 24-25
Scenic	T137N, R101W, Sections 31 and 32; T136N, R102W, Sections 3, 9-10
Scenic	T137N, R102W, Section 33; T136N, R102W, Section 6-8; T136N, R103W, Section 3
Scenic	T136N, R103W, Section 6
Scenic	T137N, R103W, Sections 31-32
Scenic	T136N, R104W, Sections 17 and 20
Recreational	T135N, R105W, Sections 1, 10-12
Scenic	T135N, R105W, Sections 14-15
Scenic	T135N, R105W, Sections 21-22, 27-29, 32-33
Scenic	T134N, R105W, Section 8

<b>Medora Ranger District, cont.</b>	
Scenic	T134N, R105W, Section 19; T134N, R106W, Sections 24-25
Wild	T134N, R105W, Section 31
Scenic	T133N, R105W, Sections 6 and 8
Scenic	T133N, R105W, Section 18, 20 and 30; T133N, R106W, Section 13

**Potential Classifications:** A total of 134.33 miles of the Little Missouri River that either borders or flows fully within lands administered by the U.S. Forest Service were inventoried and determined as eligible for potential inclusion in the National Wild and Scenic River System.

The miles of river segments and their classifications are listed below, by district:

McKenzie Ranger District	Recreational	7.15 miles
	Scenic	16.25 miles
	Wild	1.61 miles
Medora Ranger District	Recreational	6.51 miles
	Scenic	74.58 miles
	Wild	1.69 miles

According to the State of North Dakota, outstandingly remarkable features include significant fisheries and wildlife resources and high-quality scenic values.

## Alternatives

Alternatives 4 and 5 make recommendations for inclusion in the NWSRS; however, recommendations do not always follow potential classifications. Wild classifications generally changes to scenic in both alternatives, although 3.3 miles of wild classification remains in Alternative 4.

- Alternative 1: Not recommended for designation; however, the Little Missouri River would be managed under its current state classification as a State Scenic River.
- Alternative 2: Not recommended for designation; however, the Little Missouri River would be managed under its current state classification as a State Scenic River, with the appropriate state laws applied.
- DEIS Alternative 3: Not recommended for designation; however, the Little Missouri River would be managed as a scenic corridor under Management Area Prescription 4.22.
- FEIS Alternative 3: Not recommended for designation; however, the Little Missouri River would be managed as a scenic corridor under Management Area Prescription 4.22.
- Alternative 4: Recommended for designation. A total of 105.9 miles is recommended, with 3.3 miles as wild, 88.9 miles as scenic, miles and 13.7 miles as recreational.
- Alternative 5: Recommended for designation. A total of 105.9 miles is recommended, with 92.2 miles as scenic and 13.7 miles as recreational.

## Suitability

All wild segments are analyzed together in one section, regardless of their location along the river. The same process was used for all scenic and recreational segments. This approach was used in order to minimize redundancy and repetition, making this section shorter and easier to read.

### *Wild Segments*

#### **Suitability Factor Number 1: Characteristics that do or do not make the area a worthy addition to the National Wild and Scenic River System.**

These river segments are highly scenic. They are remote and generally inaccessible, except by trail. A number of visually appealing habitats are visible from the river, including ecosystems representing upland grasslands, river breaks, river bottoms, and terraces. Stream flow is unimpeded. No river impoundments occur anywhere along the entire stretch of the Little Missouri River.

No developed roads or developed road crossings over the river corridor exist. No railroad corridors exist in the area. No fence lines cross the river in these segments. Infrequent traffic may be visible in the distance.

The primary uses in these river corridor segments are livestock grazing, the infrequent cutting of hay, and recreation. Recreation includes hunting, hiking, canoeing, horseback riding, and nature study.

#### **Suitability Factor Number 2: Current status of landownership and use in the area including the amount of private land and the uses of such land.**

Land in the eligible corridor segments is owned by USDA-Forest Service, State of North Dakota, and Bureau of Land Management. The primary uses within these corridors are livestock grazing, occasional haying, and recreation.

#### **Suitability Factor Number 3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed by designation and values that would be foreclosed or diminished if the area is not protected as part of the National Wild and Scenic River System.**

##### **Transportation**

No change in use or trend is anticipated under designation or under nondesignation.

##### **Water**

No change in use or trend is anticipated under designation or under nondesignation.

##### **Minerals**

No locatable or common variety minerals are known to exist in these segments. In areas with a Wild River designation, no ground-disturbing activities would be allowed on lands with federal minerals.

### **Timber**

No commercial timber cutting or firewood collection has been or would be allowed within these segments under any designation.

### **Fisheries and Wildlife**

Fisheries and wildlife would not be affected by designation or nondesignation of these segments.

### **Recreation, Scenic, and Subsistence**

The high scenic qualities of the river would be maintained under designation. Designation may increase recreational use. Any occasional trapping within the corridor would continue under designation.

### **Effects of Nondesignation**

Nondesignation probably would not change current or predicted uses of recreation, minerals development, livestock grazing, or other activities in the eligible corridor segments.

### **Suitability Factor Number 4: Public, state, and local government interests.**

The consortium of groups that published *Badlands on the Brink* has recommended that these segments be federally designated as scenic river corridors. Billings County and the Golden Valley County Commissioners are opposed to federal designation. Currently, the State of North Dakota manages the Little Missouri River as a State Scenic River from the South Dakota border to the State Highway 22 bridge crossing at Little Missouri Bay on Lake Sakakawea. Residents in the vicinity of the river generally seem to favor the state's current management of the river.

### **Suitability Factor Number 5: Estimated costs of land acquisition and management as a Wild and Scenic River.**

Designation would require no land acquisition and, as a result, no costs for land purchase. Should Congress federally designate any segments of the river, a river management plan would be developed. The estimated cost for developing such a plan is \$100,000. No land acquisitions are planned.

## ***Scenic Segments***

### **Suitability Factor Number 1: Characteristics that do or do not make the area a worthy addition to the National Wild and Scenic River System.**

These river segments are scenic. Some segments are remote; others are quite accessible. A number of visually appealing habitats are visible from the river, including ecosystems representative of river bottoms, river breaks, terraces, toe slopes, upland grasslands and hardwood draws. Stream flow is unimpeded. No river impoundments occur anywhere along the Little Missouri River.

Developed roads may be present in some segments. In other segments, developed roads are not present. No developed road crossings exist in any of the eligible scenic segments. Features or conditions that resulted in the scenic classification are present, including water quality, conspicuous and/or inconspicuous roads, buildings and foundations, oil wells, power lines, diversion ditches, cable-car river crossings, power line river crossings, undeveloped-road river



crossings, pipeline river crossings, corrals and extensive hay fields. Traffic and ranches may be visible from the river in these segments.

**Suitability Factor Number 2: Current status of landownership and use in the area including the amount of private land and the uses of such land.**

Land in these segments is owned by USDA-Forest Service, State of North Dakota, National Park Service, and individuals. Some coordination between agencies may be necessary, especially where different agencies control opposite sides of any river segment. The primary uses in these river segments are livestock grazing, occasional haying, and recreation, including sight-seeing.

**Suitability Factor Number 3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed by designation and values that would be foreclosed or diminished if the area is not protected as part of the National Wild and Scenic River System.**

**Transportation**

No change is anticipated under designation or nondesignation.

**Minerals**

Minerals activity would be allowed in eligible scenic corridor segments. Within the scenic corridor segment, surface occupancy for extracting federal leasable minerals would require meeting a Moderate Scenic Integrity Objective. No locatable or common variety minerals are known to exist in any of the eligible segments.

**Timber**

No commercial timber cutting or firewood cutting has been or would be allowed in any of the eligible scenic river corridor segments under any designation.

**Fisheries and Wildlife**

Fisheries and wildlife would not be affected under designation or nondesignation.

**Recreation, Scenic, and Subsistence**

The continued scenic qualities of the river would be maintained by designation. Designation might increase recreational use. Any occasional trapping within the eligible corridor segments would continue under designation.

**Effects of Nondesignation**

Nondesignation of these river segments probably would not change current or predicted uses of recreation, minerals development, livestock grazing, or other activities or uses.

**Suitability Factor Number 4: Public, state, and local government interests.**

The consortium of groups that published *Badlands on the Brink* has recommended that these segments be federally designated as scenic river corridors. Billings County and the Golden Valley County Commissioners are opposed to federal designation. Currently, the State of North Dakota manages the Little Missouri River as a State Scenic River from the South Dakota border to the State Highway 22 bridge crossing at Little Missouri Bay on Lake Sakakawea. Residents in the vicinity of the river generally seem to favor the state's current management of the river.

**Suitability Factor Number 5: Estimated costs of land acquisition and management as a Wild and Scenic River.**

Designation would require no land acquisition and, as a result, no costs for land purchase. Should Congress federally designate any segments of the river, a river management plan would be developed. The estimated cost for developing such a plan is \$100,000. No land acquisitions are planned.

***Recreational Segments***

**Suitability Factor Number 1: Characteristics that do or do not make the area a worthy addition to the National Wild and Scenic River System.**

These river segments are scenic and may be readily accessible. A number of visually appealing habitats are visible from the river, including ecosystems representative of river bottoms, river breaks, terraces, toe slopes, upland grasslands, and hardwood draws. Stream flow is unimpeded. No river impoundments occur anywhere along the Little Missouri River.

Developed roads may be present. Features or conditions that resulted in the recreational classification are present, including long stretches of conspicuous roads, inconspicuous roads, pivot irrigation, and oil wells. Traffic and ranches may be visible from the river in these segments.

**Suitability Factor Number 2: Current status of landownership and use in the area including the amount of private land and the uses of such land.**

Land ownership in these segments is a mix of both USDA-Forest Service, State of North Dakota, and private. Some coordination between the Forest Service and the State of North Dakota may be needed under designation, especially where the state and the Forest Service control opposite sides of the river. Livestock grazing, occasional haying, some transport of freight (such as oil, gas, and cattle), and recreation, such as sight-seeing, occur in these river segments.

**Suitability Factor Number 3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed by designation and values that would be foreclosed or diminished if the area is not protected as part of the National Wild and Scenic River System.**

**Transportation**

No change in use or trend is anticipated under designation or nondesignation.

**Water**

No change in use or trend is anticipated under designation or nondesignation.

**Minerals**

Minerals activity would be allowed in eligible recreational corridor segments. Within the recreational corridor segment, surface occupancy for extracting federal leasable minerals would require meeting a Moderate Scenic Integrity Objective. No locatable or common variety minerals are known to exist in any of the eligible segments.

### **Timber**

No commercial timber cutting or firewood cutting has been or would be allowed in any of the eligible recreational river corridor segments under any designation.

### **Fisheries and Wildlife**

Fisheries and wildlife would not be affected under designation or nondesignation.

### **Recreation, Scenic, and Subsistence**

The continued scenic qualities of the river would be maintained by designation. Designation might increase recreational use. Any occasional trapping within the eligible corridor segments would continue under designation.

### **Effects of Nondesignation**

Nondesignation of these river segments probably would not change current or predicted uses of recreation, minerals development, livestock grazing, or other activities or uses.

### **Suitability Factor Number 4: Public, state, and local government interests.**

The consortium of groups that published *Badlands on the Brink* has recommended that these segments be federally designated as scenic river corridors. Billings County and the Golden Valley County Commissioners are opposed to federal designation. Currently, the State of North Dakota manages the Little Missouri River as a State Scenic River from the South Dakota border to the State Highway 22 bridge crossing at Little Missouri Bay on Lake Sakakawea. Residents in the vicinity of the river generally seem to favor the state's current management of the river.

### **Suitability Factor Number 5: Estimated costs of land acquisition and management as a Wild and Scenic River.**

Designation would require no land acquisition and, as a result, no costs for land purchase. Should Congress federally designate any segments of the river, a river management plan would be developed. The estimated cost for developing such a plan is \$100,000. No land acquisitions are planned.

## **Little Missouri (Theodore Roosevelt National Park)**

*Reviewers wishing to comment on the National Park's recommendations for wild and scenic designations should send their written comments to the Superintendent, Theodore Roosevelt National Park, P.O. Box 7, Medora, North Dakota 58645. Comments must be received by the closing date of the USFS Management Plans Revisions.*

**Description:** Please refer to the description of the Little Missouri River under the preceding section for the Dakota Prairie Grasslands.

**Eligibility:** Theodore Roosevelt National Park consists of three distinct units: the South Unit, the Elkhorn Unit and the North Unit. There are 11.5 miles of the Little Missouri River within the South Unit, 1.0 miles in the Elkhorn Unit and 14.7 miles in the North Unit. A total of 27.2 miles of the Little Missouri River that either borders or flows fully within lands administered by the National Park Service were inventoried in 1992 and determined to be eligible for possible inclusion in the National Wild and Scenic River System.

## **Appendix G**

**Potential Classifications:** The total river miles in each classification for each unit are listed below:

South Unit	Recreational	1.5 miles
	Scenic	5.8 miles
	Wild	4.2 miles
Elkhorn Unit	Scenic	1.0 miles
North Unit	Scenic	4.0 miles
	Wild	10.7 miles

Potential classifications and locations for eligible segments within each park unit are listed below:

### **South Unit**

Recreational	T140N, R102W, Sections 22 and 21
Scenic	T140N, R102 W, Sections 16, 15, 10, 11 and 1
Scenic	T141N, R101W, Sections 33 (to confluence with Beef Corral Wash)
Wild	T141N, R101W, Sections 33, 32, 29, 30 and 19

### **Elkhorn Unit**

Scenic:	T143N, R102W, Section 4
Scenic:	T144N, R102W, Section 33

### **North Unit**

Wild:	T147N, R100W, Sections 8, 9 and 4
Wild:	T148N, R100W, Sections 33, 34, 35 and 36
Wild:	T148N, R99W, Sections 31, 32 and 33
Scenic:	T147N, R99W, Sections 4 and 3
Scenic:	T148N, R99W, Sections 34 and 35

## **Alternatives**

The Theodore Roosevelt National Park identified 4 alternatives, while the U. S. Forest Service developed 5 alternatives in the DEIS and evaluated a modified DEIS Alternative 3 which is called FEIS Alternative 3. The four Park Service developed alternatives were merged and used in FEIS alternatives as follows:

**Alternative 1 and 2:** These alternatives makes no recommendation to Congress for Wild or Scenic River System designation. Current management of portions of the river within the park's boundary would continue; the policies and regulations for the park's undeveloped zone and the state's Scenic River guidelines would be applied.

**DEIS Alternative 3:** This alternative include a recommendation for designation according to the potential classification for each segment of river where the park manages both sides of the river within the South and North Units. This alternative also includes the one mile of the west shoreline within the Elkhorn Unit.

**FEIS Alternative 3:** This alternative includes a recommendation for designation according to the potential classification for each segment of river where the park manages both sides of the river within the South and North Units. This recommendation includes:

- 5.8 miles of Scenic River and 4.2 miles of Wild River in the South Unit, and
- 10.7 miles of Wild River in the North Unit.

**Alternative 4:** This alternative would recommend designation with a potential classification of recreational, scenic, or wild for all the river miles within the park's boundary, including along the segment where the park manages only one side of the river.

**Alternative 5:** This alternative would recommend scenic status for all of the river miles classified as wild or scenic to more closely comply with the State of North Dakota's designation of the Little Missouri River as a State Scenic River. This recommendation would only apply to the river where the park manages both sides of the river and the Elkhorn Unit.

FEIS Alternative 3 above is the preferred alternative for the National Park Service. This alternative recommends 4.2 miles of scenic river designation in the South Unit and a total of 14.9 miles of wild river designation in the South and North Units.

## Suitability

All wild segments are analyzed together in one section, regardless of their location along the river. The same can be said for all scenic and all recreational segments. These segments have been combined to reduce the redundancy and repetition of this report.

### *Wild Segments*

#### **Suitability Factor Number 1: Characteristics that do or do not make the area a worthy addition to the National Wild and Scenic River System.**

These river segments are highly scenic within the North Dakota badlands. They are remote and generally inaccessible, except by trail. Visually appealing habitats are visible from the river, including ecosystems representing upland grasslands, river breaks, river bottoms, and terraces. Native ungulates are often seen with the park's boundaries, including bison, whitetail deer, mule deer, and pronghorn antelope. In the South Unit, one may also see elk and wild horses. In the North Unit, in addition to the species listed above, bighorn sheep can be seen in the breaks above the river. There are numerous other wildlife species to be seen, including beaver, muskrat, coyotes, bobcats, raptors, and other birds.

Stream flow is unimpeded. No river impoundments occur anywhere along the entire stretch of the river, which is approximately 550 miles long. In North Dakota, there are only five highway bridges that cross the 275 miles of the Little Missouri River in the state.

In the proposed wild segments within the park, there is one short (one-half mile) shoreline development in the North Unit. This development consists of a campground on the north shore adjacent to the river in Section 31, T148N, R99W. The campground and access road are well-screened by vegetation. The noise from and visibility of this development are minimal and insignificant.

There are no roads crossing the river or immediately adjacent to the river in these two wild segments. In the North Unit, where the park road is within one-quarter mile of the river (portions of Sections 31, 32, and 33), the road is either well-screened by vegetation or is behind topography (Sections 32 and 33). If any traffic noise is heard, it is insignificant and infrequent.

No fence lines cross the river within the classified wild segments. There is a fence across the river at the north boundary of the South Unit, the terminus of the wild segment. At the North Unit, there is a fence line in Section 8, T147N, R100W at the park's boundary where the proposed wild segment begins and a fence line where the river leaves the park's boundary at Section 33, T148N, R99W. Because these three fence lines are at the boundaries of the wild segments, they do not distract from the feeling of experiencing a wild river.

No railway corridors exist in the vicinity of the wild segments.

The primary uses in the proposed wild river segments relate to naturally occurring processes, such as wildlife grazing, and also relate to recreational use, such as hiking, horseback riding, and canoeing. There are no agricultural, commercial, or industrial practices within the park's boundaries.

**Suitability Factor Number 2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.**

The National Park Service manages all lands within the proposed wild segments of the river. There are no private surface or mineral in-holdings within these segments. National Parks were created to conserve the natural and cultural resources for the public's enjoyment.

**Suitability Factor Number 3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed by designation and values that would be foreclosed or diminished if the area is not protected as part of the National Wild and Scenic River System.**

**Transportation**

No change in use or trend under designation or nondesignation.

**Water**

There are no known water improvement or impoundment projects proposed on the Little Missouri River. Designation would ensure that should such projects be proposed, natural flow would continue to meet the minimum needs of the remarkable values identified within the wild segments. If these segments are not designated, it would be more difficult for the park to ensure that activities or projects planned outside the park's boundaries would not impact the resources or natural processes occurring within the park.

The current water quality within the wild segments meets the minimum standards for designation under the Wild and Scenic Rivers Act. Designation would help the Park Service protect water resources in the park from impacts originating outside park boundaries. If future activities occurring outside the park's boundaries degrade the water quality or have the potential to degrade water quality within the wild segments, the park would be in a better position to work with the responsible entity and the State of North Dakota to mitigate the degradation. Without designation, it may be impossible for the park to mitigate water quality impacts originating outside park boundaries.

### **Minerals**

There are no mineral withholdings within the wild segments. Since the wild segments are within the park's boundaries, no mineral extraction activities would be permitted.

### **Timber**

No commercial timber cutting or firewood collection is permitted within the park's boundaries. Any hazard fuel removal would be completed under an approved plan that would consider and mitigate potential effects to wild river values.

### **Fisheries and Wildlife**

Designation would ensure that natural flows meet the needs of fisheries and wildlife and that the water quality does not significantly degrade. Nondesignation of these segments would make it more difficult for the park to provide timely input on projects (outside park boundaries) that might regulate flows and impact fisheries and wildlife.

### **Recreation, Scenic, and Subsistence**

Designation as a wild river would probably increase the recreational use. With an increase in recreational use, there may be sufficient demand to support commercial canoeing outfitter businesses. The extent of increased use is unknown since the magnitude of water flow to support canoeing use usually occurs only in the spring and early summer. Since the wild segments of the river can be seen from viewpoints and hiking trails, a designated wild river within the State of North Dakota is likely to attract more park visitors and tourism to the area. If this occurs, it would help the growing tourism industry in western North Dakota. Increased use may result in more trespass onto private land by recreationists. This might be mitigated by maps, education, and more signs indicating public versus private ownership.

Without designation, the amount of the river use would probably continue at the same levels the park is currently experiencing.

### **Suitability Factor Number 4: Public, state, and local government interests.**

The consortium of groups that published *Badlands on the Brink* has recommended that segments within the park be federally designated as either wild or scenic. After information was published in the Sierra Club magazine about the Wild and Scenic River Study, the park received more than 550 postcards or letters encouraging the designation of the river within the park's boundaries during the formal public scoping process. The park has not received any correspondence opposing wild and scenic designation during the formal public scoping process.

Residents who attended scoping meetings in North Dakota were opposed to federal designation, although a few did publicly state that they didn't care whether the river was designated within the park's boundaries. These residents indicated they were opposed because of the impacts that designation might have on their use of private land within the river corridor. Most expressed support for the current management of the river under the State Scenic River designation, even though this law provides for no enforcement authority of the guidelines developed by the Little Missouri Scenic River Commission. Billings County and McKenzie County commissioners oppose federal designation within or outside of the park's boundaries. Neither the State of North Dakota nor the state's Congressional delegation took a public position on designation under the Wild and Scenic Rivers Act during the scoping process.

During the time the DEIS was available for public comments, both Theodore Roosevelt National Park and the USFS Northern Great Plains planning office at Chadron, Nebraska received comments that specifically addressed the wild and scenic designation for the Little Missouri River within the park boundaries. T.R. National Park received 144 comments during the public input period. Of these, 142 comments were in favor of designation and 2 were opposed. The Chadron USFS office received 218 comments that specifically addressed wild and scenic designation within the park boundaries. Of these 218 comments, 169 expressed support for the preferred alternative and designation and 49 expressed comments against pursuing designation within the park boundaries. There was a combined total of 362 comments with 86% in favor of designation within the park and 14% opposed.

**Suitability Factor Number 5: Estimated costs of land acquisition and management as a Wild and Scenic River.**

All of the wild segments are within the park's boundaries. Consequently, there would be no land acquisition costs involved. Management costs for developing a river management plan and for monitoring resource and visitor activities along all the river segments would come from the park's base budget and are expected to be approximately \$30,000 per year. No land acquisitions are necessary.

***Scenic Segments***

**Suitability Factor Number 1: Characteristics that do or do not make the area a worthy addition to the National Wild and Scenic River System.**

The three river segments classified as scenic are truly scenic in nature within the North Dakota badlands. The scenic segment within the South Unit is adjacent to the main park road and is visible from numerous viewpoints or road sections. The proposed scenic segments are accessible, but require short hikes either cross-country or on a trail from parking lots. There are no parking lots on the shore of the river.

Visually appealing habitats are visible from the river, including ecosystems representing upland grasslands, river breaks, river bottoms, and terraces. Native ungulates are often seen with the park's boundaries including bison, whitetail deer, mule deer, and pronghorn antelope. In the South Unit, one may also see elk and wild horses. In the North Unit, in addition to the species listed above, bighorn sheep can be seen in the breaks above the river. There are numerous other wildlife species to be seen, including beaver, muskrat, coyotes, bobcats, raptors, and other birds.

Stream flow is unimpeded. No river impoundments occur anywhere along the entire stretch of the river, which is approximately 550 miles long. In North Dakota, there are only five highway bridges that cross the 275 miles of the Little Missouri River in the state.

In the scenic segments within the park, there are short stretches of shoreline with limited recreational developments. In the South Unit (Section 10, T140N, R102W), approximately one-half mile of shore adjacent to the river is occupied by a campground. The campground and access road are lightly screened by vegetation. The noise and visibility of the road traffic and campground are moderate. In the North Unit, a 115-kilovolt power line crosses the scenic section of the river, and the housing and maintenance area is adjacent to the river.



There are no roads crossing the river. However, in places in the South Unit, the park road is within one-quarter mile of the river, and traffic noise may be heard on occasion. There are two-track roads in the vicinity of the Elkhorn Unit, and vehicle noise can be heard by recreational users on the proposed scenic river segment. The intrusion is only light because of the low volume of vehicular traffic.

No fence lines cross the river within the scenic river segments. No railway corridors exist in or along the scenic segments. However, train whistle noise from the railroad line south of Interstate 94 can be heard, on occasion, in the scenic segment of the South Unit.

The primary uses in these proposed scenic river segments relate to naturally occurring processes, such as wildlife grazing, and recreation, such as camping, hiking, horseback riding, and canoeing. There are no agricultural, commercial, or industrial practices within the scenic segments, except for the small horse outfitter concession at the historic Peaceful Valley Ranch. The ranch house, barns, and corrals are screened by vegetation.

**Suitability Factor Number 2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.**

The National Park Service manages all lands within the proposed scenic segment of the South Unit with the uses being for conservation of the natural and cultural resources and the public's enjoyment of these resources.

The Elkhorn Unit is nationally significant because it is the site of one of Theodore Roosevelt's two ranches and the location where he further developed his conservation ethic that became so important in later years when he was president. At the Elkhorn Unit, the National Park Service manages the west shoreline; the east shoreline of the river is in private ownership. The State Historical Society of North Dakota owns undeveloped tracts to the north and south of the Elkhorn Unit. The U.S. Forest Service also manages land in the immediate vicinity. The private land uses on the east side of the river include ranching, hunting, and commercial lodging operations. The uses on National Park Service and state land include visiting a historically significant site, hiking, sight-seeing, and wildlife viewing.

There is one potential scenic segment in the North Unit. In this segment, the National Park Service manages the north shoreline, and the south shoreline is in either private ownership or managed by the U.S. Forest Service. The uses of the parkland are the conservation of the natural and cultural resources for the public's enjoyment of these resources. Similar uses occur on the U.S. Forest Service, with additional uses including livestock grazing and hunting. Grazing is the dominant use on the private land.

**Suitability Factor Number 3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed by designation and values that would be foreclosed or diminished if the area is not protected as part of the National Wild and Scenic River System.**

**Transportation**

No change in use or trend under designation or nondesignation.

**Water**

There are no known water improvement or impoundment projects proposed on the Little Missouri River. Designation would ensure that should such projects be proposed, natural water

flows would continue to meet the minimum needs of the remarkable values identified with the scenic segments. If these segments are not designated, it would be more difficult for the park to ensure that activities or projects planned outside the park's boundaries would not impact the resources or natural processes occurring with the park.

The current water quality within the scenic segments meets the minimum standards for designation under the Wild and Scenic Rivers Act, although meeting Federal or State standards is not a prerequisite for scenic classification. Designation would help the Park Service protect water resources in the park from impacts originating outside park boundaries. If future activities occurring outside the park's boundaries degrade the water quality or have the potential to degrade water quality within the wild segments, the park would be in a better position to work with the responsible entity and the State of North Dakota to mitigate the degradation. Without designation, it may be impossible for the park to mitigate water quality impacts originating outside park boundaries.

**Minerals**

There are no mineral in-holdings within the classified scenic segments within the North or South Units. In the South Unit, minerals would not be impacted by designation or by nondesignation.

In the North Unit, only one shoreline is within the park. The land that the U.S. Forest Service administers in Sections 3 and 4 of T147N, R99W also qualifies for a scenic classification. With this classification, mineral activity would be permitted on U.S. Forest Service land, but surface occupancy within the scenic corridor would generally be prohibited. Thus, designation would protect the scenic and recreational values along the river, while nondesignation may allow these values to degrade if the mineral resources are developed. The designation or nondesignation would probably have little impact on the development of the private minerals.

In the Elkhorn Unit, all minerals are federal except for a 44.72-acre parcel of private minerals. Approximately one-quarter mile of this acreage borders the Little Missouri River. Surface occupancy would generally be prohibited within the National Park. The river in the Elkhorn Unit is not being recommended for scenic status.

**Timber**

No commercial timber cutting or firewood collection is permitted within the park's boundaries. Any hazard fuel removal would be completed under an approved plan that would consider and mitigate potential effects to scenic river values.

**Fisheries and Wildlife**

Designation would ensure that natural flows meet the needs of fisheries and wildlife, and water quality does not significantly degrade. Nondesignation of these segments would make it more difficult for the park to provide timely input on projects outside the park's boundaries that might regulate flows and impact fisheries and wildlife.

### **Recreation, Scenic, and Subsistence**

Designation as a scenic river would probably increase the recreational use. With an increase in recreational use, there may be sufficient demand to support commercial canoeing outfitter businesses. The extent of increased use is not known because the magnitude of water flow to support canoeing use usually occurs only in the spring and early summer. Since the scenic segments of the river can be seen from viewpoints and hiking trails, a designated scenic river within the State of North Dakota is likely to attract more park visitors and tourism to the area. If this occurs, it would help the growing tourism industry in western North Dakota. Increased use may result in more trespass onto private land by recreationists. This might be mitigated by maps, education, and more signs indicating public versus private ownership.

Without designation, the amount of the river use would probably continue at the same levels the park is currently experiencing.

### **Suitability Factor Number 4: Public, state, and local government interests.**

The consortium of groups that published *Badlands on the Brink* has recommended that segments within the park be federally designated as either wild or scenic. After information was published in the Sierra Club magazine about the Wild and Scenic River Study, the park received more than 550 postcards or letters encouraging the designation of the river within the park's boundaries. The park did not receive any correspondence opposing wild and scenic designation during the initial scoping process.

Residents who attended scoping meetings in North Dakota were opposed to federal designation, although a few did publicly state that they didn't care whether the river was designated within the park's boundaries. These residents indicated they were opposed because of the impacts that designation might have on their use of private land within the river corridor. Most expressed support for the current management of the river under the State Scenic River designation, even though this law provides for no enforcement authority of the guidelines developed by the Little Missouri Scenic River Commission. Billings County and McKenzie County commissioners are opposed to federal designation within or outside of the park's boundaries. Neither the State of North Dakota nor the state's Congressional delegation took a public position on designation under the Wild and Scenic Rivers Act during the scoping process.

During the time the DEIS was available for public comments, both Theodore Roosevelt National Park and the USFS Northern Great Plains planning office at Chadron, Nebraska received comments that specifically addressed the wild and scenic designation for the Little Missouri River within the park boundaries. T.R. National Park received 144 comments during the public input period. Of these 142 comments were in favor of designation and 2 were opposed. The Chadron USFS office received 218 comments that specifically addressed wild and scenic designation within the park boundaries. Of these 218 comments, 169 expressed support for the preferred alternative and designation and 49 expressed comments against pursuing designation within the park boundaries. There was a combined total of 362 comments with 86% in favor of designation within the park and 14% opposed.

**Suitability Factor Number 5: Estimated costs of land acquisition and management as a Wild and Scenic River.**

All of the scenic segments are within the park's boundaries. Consequently, there would be no land acquisition costs involved. Management costs for developing a river management plan and for monitoring resource and visitor activities along all the river segments would come from the park's base budget and are expected to be approximately 1/2 a full time position and approximately \$30,000 per year. No land acquisitions are necessary.

***Recreational Segments***

In the FEIS Alternative 3, there are no recreational segments being recommended for designation

**Suitability Factor Number 1: Characteristics that do or do not make the area a worthy addition to the National Wild and Scenic River System.**

The one river segment potentially classified as recreational occurs in the South Unit and is 1.5 miles long. The National Park Service only manages the east shoreline of the river. The other shoreline and half of the river bed is in private ownership. Thus, designating this segment as a recreational river would cause awkward and potentially conflicting management of the river.

This segment is adjacent to the Interstate 94 Business Loop and flows under Interstate 94 with its two highway bridges. After launching in Medora, Chimney Park State Historic Site or Sully Creek State Park, this segment would be used by canoeists to access the scenic and wild segments of the river in the South Unit.

Besides the Interstate 94 Business Loop adjacent to the river and the interstate bridges over the river, there is also a busy railroad adjacent to the river. In addition, there is a major private campground with year-long residential trailer units and a sewage lagoon system. Other developments that would involve considerable vehicle traffic are planned within the river corridor adjacent to this segment.

**Suitability Factor Number 2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.**

The east shoreline is managed by the National Park Service, and the west shoreline is in private ownership. The primary uses in this proposed recreational river segment relate to camping, sight-seeing, and canoeing. Private land uses include livestock grazing and a recreational campground. In the future, it is likely that more of this private land will be developed.

**Suitability Factor Number 3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed by designation and values that would be foreclosed or diminished if the area is not protected as part of the National Wild and Scenic River System.**

**Transportation**

No change in use or trend under designation or nondesignation.

**Water**

There are no known water improvement or impoundment projects proposed on the Little Missouri River. Designation would ensure that should such project be proposed, natural water

flows would continue to meet the minimum needs of the remarkable values identified with the recreational segment. If the segment is not designated, it would be more difficult for the park to ensure that activities or projects planned outside the park's boundaries would not impact the resources or natural processes occurring with the park.

The current water quality within the recreational segment meets the minimum standards for designation under the Wild and Scenic Rivers Act, although meeting Federal or State standards is not a prerequisite for recreational classification. Designation would help the Park Service protect water resources in the park from impacts originating outside park boundaries. If future activities occurring outside the park's boundaries degrade the water quality or have the potential to degrade water quality within the wild segments, the park would be in a better position to work with the responsible entity and the State of North Dakota to mitigate the degradation. Without designation, it may be impossible for the park to mitigate water quality impacts originating outside park boundaries.

### **Minerals**

Mineral development would not be affected under designation or nondesignation.

### **Timber**

No commercial timber cutting or firewood collection is permitted within the park's boundaries. Any hazard fuel removal would be completed under an approved plan that would consider and mitigate potential effects to recreational river values.

### **Fisheries and Wildlife**

Designation would ensure that natural flows meet the needs of fisheries and wildlife and water quality does not significantly degrade. Nondesignation of this segment would make it more difficult for the park to provide timely input on projects outside the park's boundaries that might regulate flows and impact fisheries and wildlife.

### **Recreation, Scenic, and Subsistence**

Designation as a recreational river would probably increase the recreational use, particularly when combined with segments of scenic and wild river. With an increase in recreational use, there may be sufficient demand to support a commercial canoeing outfitter business. The extent of increased use is not known because the magnitude of water flow to support canoeing use usually occurs only in the spring and early summer. It is unlikely that the designation or nondesignation of this recreational river segment would have much impact on the recreational values or tourism industry. It would only have a positive impact on recreation and tourism if recreational designation were combined with scenic and wild designation.

### **Suitability Factor Number 4: Public, state, and local government interests.**

The consortium of groups that published *Badlands on the Brink* has recommended that segments within the park be federally designated as either wild or "scenic." After information was published in the Sierra Club magazine about the Wild and Scenic River Study, the park received more than 550 postcards or letters encouraging the designation of the river within the park's boundaries. The park has not received any correspondence opposing wild and scenic designation.

Residents who attended scoping meetings in North Dakota were opposed to federal designation, although a few did publicly state that they didn't care whether the river was designated within the park's boundaries. These residents indicated they were opposed because of the impacts that designation might have on their use of private land within the river corridor. Most expressed support for the current management of the river under the State Scenic River designation, even though this law provides for no enforcement authority of the guidelines developed by the Little Missouri Scenic River Commission. Billings County and McKenzie County commissioners are opposed to federal designation within or outside of the park's boundaries. Neither the State of North Dakota nor the state's Congressional delegation took a public position on designation under the Wild and Scenic Rivers Act during the scoping process.

**Suitability Factor Number 5: Estimated costs of land acquisition and management as a Wild and Scenic River.**

The recreational segment is within the park's boundaries. Consequently, there would be no land acquisition costs involved. Management costs for developing a river management plan and for monitoring resource and visitor activities along all the river segments would come from the park's base budget and are expected to be approximately \$30,000 per year. No land acquisitions are planned.

**Middle Loup (Nebraska National Forest)**

**Description:** The Middle Loup River rises in the Nebraska Sandhills about 50 miles northwest of Mullen. It flows to the southeast and drains into the Platte River at Columbus, about 250 miles downstream. Along with the North Loup and South Loup Rivers, the Middle Loup drains the majority of the Sandhills region of Nebraska, about 15,200 square miles. The Middle Loup is characterized by low flow fluctuations. It is shallow year-round, carries a heavy sediment load, and is a naturally braided river, with sandy channels shifting across a broad floodplain. Historically, this floodplain consisted mainly of both wet and dry meadows; however, water diversions, the elimination of bison, and fire suppression have allowed woodlands to encroach upon the river's banks and upon many of the sandbars. A great many meadows have been converted to cropland, hay meadows, or pastures for grazing.

On the half-mile section of the river being examined, sandbars and aquatic vegetation are evident and the floodplain is relatively small, perhaps a mile across. Only a portion of that floodplain is administered by the Bessey Ranger District. On this section, the river gives way to essentially one river terrace. On the south side, the bank is lined with a diversity of trees and woody species, including green ash, locust, cottonwood, Boston ivy, wild plum, cedar, ponderosa pine, and juniper. The north side of the river also includes woody species, but retains a greater share of meadow components, including grasses and sedges. The stream-flow regime on this stretch is less restricted than on downstream stretches of the Middle Loup, where major water diversions pull water from the river for municipal and agricultural uses.

**Eligibility:** The eligible portion of the river is found in Section 2, Range 26 West, Township 22 North.

**Potential Classifications:** Approximately one-half mile of the Middle Loup River that flows fully within lands administered by the U.S. Forest Service was inventoried for the Wild and Scenic River System. This one-half-mile river section holds a potential classification as

recreational. Outstandingly remarkable features include the Bessey Tree Nursery and the ranger district office building, both of which are listed on the National Register of Historic Places. In addition, the Bessey Recreational Complex is considered by U.S. Forest Service Region 2 to be significant for its recreational features.

## Alternatives

- Alternative 1: Not recommended for designation.
- Alternative 2: Not recommended for designation.
- Alternative 3: Not recommended for designation.
- FEIS Alternative 3: Not recommended for designation.
- Alternative 4: Recommended for a designation with a recreational classification.
- Alternative 5: Not recommended for designation.

## Suitability

### **Suitability Factor Number 1: Characteristics that do or do not make the area a worthy addition to the National Wild and Scenic River System.**

The predominate values of this section of river are the historical significance of the Bessey Tree Nursery and ranger district office building and the recreational features of the Bessey Recreational Complex. The Middle Loup River, including this segment of it, has been traditionally used for recreational tubing, canoeing, and swimming. Bank stabilization structures are present on this stretch and do detract from the natural setting. Tree plantings around the recreational complex and nursery have a somewhat artificial appearance. A highway bridge, along State Highway 86B, also crosses the river. Another bridge, to be used as a trail bridge connecting the recreational complex with the town of Halsey, is planned and will likely be placed over this stretch of river. The bridge is being moved from a former site and is of historic value. Both highway and railroad traffic can be heard and sometimes seen from portions of the river. The short length of this section of eligible river may also argue against its recommendation for the National Wild and Scenic River System.

### **Suitability Factor Number 2: Current status of landownership and use in the area, including the amount of private land and the uses of such land.**

This section of river is under federal management, administered by the USDA-Forest Service. Adjacent land is owned by private interests. Some private access points to the river, mostly for recreational purposes (such as launching canoes), are found in the area. However, there is only limited, legal public access to the river from private lands. A private gravel pit lies nearby. Livestock grazing is a land use on private lands in the area. Recreation and tree production are the dominant current uses on National Forest System lands in the area.

**Suitability Factor Number 3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed by designation and values that would be foreclosed or diminished if the area is not protected as part of the National Wild and Scenic River System.**

**Transportation**

Little would change in terms of transportation under designation. The planned trail bridge would still be constructed over the river. Few modifications to the planned construction are anticipated.

**Water**

The fairly unaltered stream-flow regime along this river section would not change under designation. The high turbidity and sediment loads affecting water quality would not change either.

**Minerals**

Some coarse sand (locally called gravel) is mined on adjacent private lands. Alluvium deposits provide sand and gravel resources in this area. However, ample supplies of coarse sand and gravel deposits are found on adjacent private lands. Although the Wild and Scenic Rivers Act does not prohibit mining within recreational segments, no mining is likely to occur under designation on this stretch of the river. The potential for leasable minerals in the area is low. Subsurface minerals are reserved by the federal government.

**Timber**

Timber along this section of the river is managed for forest health and public safety. Such management would continue under designation.

**Fisheries and Wildlife**

Opportunities for sports fisheries is low along this stretch of the river. Such opportunities would not increase under designation. Such fish species as the fathead minnow, red shiner, sand shiner, and channel catfish may be present in the river. Species considered rare in Nebraska (the Iowa darter, pearl dace, and finscale dace) are more commonly found in small Sandhills streams and may or may not be found in this stretch of the river.

Common wildlife species include white-tailed deer, mule deer, wild turkey, beaver, and raccoons. Many neotropical migratory birds can be found along the river. A good number of eastern bird species are found along the river, in large part because of the wooded banks. Such species include the blue jay, cardinal, summer tanager, and the ruby-throated hummingbird. Native grassland birds, like the grasshopper sparrow and upland sandpiper, may be declining as the nearby meadows are encroached upon by woody vegetation. Shorebirds may also be declining on this stretch of river, as sandbar habitat is lost to woody encroachment.

**Recreation, Scenic, and Subsistence**

Some trapping occurs along the river. Designation would not alter that. An outfitter permit is in force under a special-use permit to the Nebraska State 4-H Camp. Designation would not alter that. Designation would not likely increase recreation along this stretch of the river, simply because the section under evaluation is negligible in length (one half-mile).



### Effects of Nondesignation

Nondesignation would not affect current management of this section of the river.

### Suitability Factor Number 4: Public, state, and local government interests.

Local public opposition to designation of this stretch of the Middle Loup River is strong. The State of Nebraska has not offered a position on designation.

### Suitability Factor Number 5: Estimated costs of land acquisition and management as a Wild and Scenic River.

Designation would require the writing of a river management plan. Additional signs identifying the area as a Wild and Scenic River would likely be required. Construction of a canoe launch site would be considered. The estimated cost of designation is approximately \$10,000. No land acquisitions are planned.

## Rapid Creek (Nebraska National Forest)

**Description:** Located on the Fall River Ranger District of the Buffalo Gap National Grassland, a segment of about a mile and a half of Rapid Creek has been determined as eligible under the scenic classification. Rapid Creek rises in the central Black Hills about eight miles west of Rochford, South Dakota and flows for roughly 80 miles in a generally southwesterly direction, emptying into the Cheyenne River approximately 12 miles west of Farmingdale in southwestern South Dakota. The upper reaches of the creek drain semi-arid timberland, while the lower reaches drain arid, rolling prairie. The eligible segment of Rapid Creek lies on the plains. Rapid Creek is generally a fast-moving mountain stream that takes on the characteristics of a meandering prairie river east of Rapid City. Rapid Creek has a well-defined channel ranging between about 12 and 16 feet in width. Its floodplain exceeds a quarter-mile wide in some places. Rapid Creek is a cold-water fishery in the Black Hills, but becomes primarily a warm-water fishery out on the plains. Such fish species as channel catfish, longnose dace, shorthead redhorse, and the sand shiner occur along the eligible stretch of the Cheyenne River. Woody habitat components along this stretch of Rapid Creek help make this area attractive to such representative species as the red-tailed hawk, wood duck, Bullock's oriole, belted kingfisher, loggerhead shrike, sharp-tailed grouse, and the great-horned owl. Other wildlife species may include the pale milk snake, spiny softshell turtle, Northern leopard frog, mule deer, beaver, mink, red fox, and the white-footed mouse.

Along the eligible segment, cottonwood, green ash, willows, and chokecherry line the banks, typically intermixed with western wheatgrass, snowberry, and prairie sandreed. Some wetland vegetation is associated with this creek. Canada thistle exists along the entire stretch of the eligible segment.

**Eligibility:** The eligible segment of this river is located Section 35, Township 1 South, Range 11 East.

**Potential Classifications:** Approximately one and one-half mile of Rapid Creek, flowing entirely within lands administered by the U.S. Forest Service, was inventoried for the Wild and Scenic River System. This river section holds a potential classification as scenic. Outstandingly remarkable features include significant fisheries and wildlife resources.

## Alternatives

- Alternative 1: Not recommended for designation.
- Alternative 2: Not recommended for designation.
- Alternative 3: Not recommended for designation.
- FEIS Alternative 3: Not recommended for designation.
- Alternative 4: Recommended for a designation with a scenic classification.
- Alternative 5: Recommended for a designation with a recreational classification.

## Suitability

### **Suitability Factor Number 1: Characteristics that do or do not make the area a worthy addition to the National Wild and Scenic River System.**

The fisheries and wildlife features are unique because no other public land adjacent to Rapid Creek on the plains is available. The habitat along this stretch of river is considered quite healthy.

The relatively short length of this segment may argue against its potential value as part of the Wild and Scenic River System.

### **Suitability Factor Number 2: Current status of landownership and use in the area including the amount of private land and the uses of such land.**

The mile and a half segment is entirely administered by the U.S. Forest Service on both sides of the creek. Adjacent land uses include livestock grazing, crop production, and haying. All adjacent lands are in private ownership. National Forest System lands in the area are used predominantly for livestock grazing and recreation, including hiking, hunting, bird watching, nature study, and other associated outdoors activities.

### **Suitability Factor Number 3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed by designation and values that would be foreclosed or diminished if the area is not protected as part of the National Wild and Scenic River System.**

#### **Transportation**

Transportation either along or across this segment of Rapid Creek would not be altered based on designation.

#### **Water**

The creek bed contains rubble, gravel, and sand. A layer of silt covers much of the substrate, probably from upstream cattle traffic and farming. Monitoring of lower Rapid Creek, near Farmingdale, indicated that the stream partially supported its assigned uses from October 1993 to September 1995. The sole cause of moderate impairment was excessive total suspended solids. No change in water quality is likely to result from designation.

### **Minerals**

Known deposits of sand, gravel, Pierre shale, and gemstone resources are found along Rapid Creek. The leasable minerals potential is low. The federal government does not own the subsurface minerals rights along the eligible segment of the creek. Since the mineral ownership is the dominant estate, the Forest Service would be limited in applying restrictions on mineral development where the mineral ownership is non-federal.

### **Timber**

No commercial timber cutting or firewood collection has been or would be allowed along this stretch of Rapid Creek.

### **Fisheries and Wildlife**

Fish species known to occur in this stretch of Rapid Creek include the longnose dace, channel catfish, fathead minnow, sand shiner, flathead chub, and shorthead redhorse. Wildlife species include many species of birds, reptiles, amphibians, and mammals. Designation likely would have no effect on fish or wildlife species.

### **Recreation, Scenic, and Subsistence**

The scenic qualities of Rapid Creek along this stretch would be maintained under designation. Designation would increase public awareness, which may increase recreational use. Trapping would not be prohibited under designation.

### **Effects of Nondesignation**

Nondesignation would not affect management or the unique features of this segment of Rapid Creek.

### **Suitability Factor Number 4: Public, state, and local government interests.**

The Sierra Club publicly supports designation of this segment of Rapid Creek. State and local government agencies have neither publicly supported nor opposed designation.

### **Suitability Factor Number 5: Estimated costs of land acquisition and management as a Wild and Scenic River.**

Installation of signs would be necessary to identify this stretch of Rapid Creek as part of the Wild and Scenic River System. In addition, a river management plan would be written. Estimated cost for sign installation on both sides of this segment of Rapid Creek is \$500. Estimated costs for preparing a river management plan are \$2,000. No land acquisition along or near this stretch of Rapid Creek is planned.

## **Sheyenne (Dakota Prairie Grasslands)**

**Description:** The Sheyenne River flows entirely in North Dakota, arising in central North Dakota and emptying into the Red River near Fargo. The river has helped carve a spectacular valley 100 to 150 feet deep and a quarter-mile to a mile wide. While much of the land bordering the river is plowed, other sections, especially near the Sheyenne Sandhills (including the Sheyenne National Grassland) are amply wooded, with oak, green ash, and other deciduous species.

Extensive botanical surveys have been conducted in the Sandhills segment of the Sheyenne River, revealing numerous natural areas and many rare species occurrences. The area contains valuable zoological resources. Wildlife include Canadian geese, kingfishers, beaver, mink, wild turkey, and deer. The adjacent Sheyenne National Grassland contains the vast majority of the rare animal and plant occurrences found in the Sheyenne River Valley, including biotically rich lowland forests, fens, wetland thickets, low prairie, and oxbow wetlands. The area along the Sheyenne River has one of the most westerly occurrences of eastern hardwood forest species in the nation.

According to physical evidence, the Sheyenne River Valley has been occupied by people since the retreat of the last great glacier more than 10,000 years ago. Many prehistoric artifacts have been recovered and are among the oldest recovered in the state. Some sites may hold the key to understanding the transition of prehistoric people into the modern American Indian tribes of today. The general area is considered an historic transition region between Woodland and Plains cultures.

Euro-Americans occupied parts of the area during the fur trade era, especially during the first several decades of the nineteenth century. Homesteaders arrived with the advance of the Northern Pacific Railroad in the 1870s and 1880s. Settlement in the area continued through World War I.

Several state historic sites and National Register listings are associated with the river.

Invertebrate and vertebrate fossils have been found along the river, including bison remains in river deposits.

The Sheyenne River supports a considerable sports fishery, including channel catfish, northern pike, sauger, walleye, black bullheads, and smallmouth bass. It also provides a great deal of forage production and moderate reproduction for several sports species. No federally threatened or endangered fish species occur in the river, although eight, state-listed rare species do live in the Sheyenne River and its tributaries.

The Sheyenne River receives a substantial level of recreational use, including sight-seeing, fishing, and canoeing.

The river is generally eutrophic and seasonally poor in water quality, except during high release periods from the upstream dam on Lake Ashtabula.

The river contains a wide bottomland hardwood forest and wooded ravines. Such species as boxelder, green ash, basswood, hackberry, burr oak, ironwood, willow, and aspen are found in the area. The Sheyenne River Valley also supports one of the last forests in the nation to contain a large percentage of American elm.

The density of breeding waterfowl exceeds that of similar streams in the watershed and compares favorably with all streams statewide. The forested riparian zone also provides valuable habitat for wood ducks.

**Eligibility:** The eligible segment of the Sheyenne River is located in Township 135 North, Range 52 West, Sections 4 and 6, and Township 135 North, Range 53 West, Sections 1-2, 11 and 14-15.

**Potential Classifications:** Approximately two miles of the Sheyenne River that either border or flow fully within lands administered by the USDA-Forest Service were inventoried for the Wild and Scenic River System. These river sections hold a potential classification as recreational. Outstandingly remarkable features include the occurrence of threatened, endangered, or

sensitive plant species; archeological, hydrologic and ecological values; and a significant fisheries resource.

## Alternatives

- Alternative 1: Not recommended for designation.
- Alternative 2: Not recommended for designation.
- Alternative 3: Not recommended for designation.
- FEIS Alternative 3: Not recommended for designation.
- Alternative 4: Recommended for a designation with a recreational classification.
- Alternative 5: Not recommended for designation.

## Suitability

### **Suitability Factor Number 1: Characteristics that do or do not make the area a worthy addition to the National Wild and Scenic River System.**

Ecologically, this area is quite unique. A significant American elm component in a generous, hardwood bottoms woodland exists on this stretch of the Sheyenne River. A high density of rare and sensitive plants and wildlife occur, including daces, ferns, and the lady slipper. The setting is quite unique for the Great Plains, with a number of special plant communities not often found on most other areas in the Great Plains. Fens, oxbows, and seeps create habitat for rare plants along the river. Overall, there is a high degree of natural diversity. A high scenic quality characterizes the area, with an abundance of color, especially in the autumn. The opportunity for nature study is very high.

The small length of public ownership along the river may argue for its exclusion from the Wild and Scenic River System. In adjacent stretches of the river in private ownership, a great deal of woodlands clearing has occurred, fragmenting the riverine forest. The water quality of the Sheyenne River is very low, mainly as a result of agricultural practices. Turbidity is high, and the water contains high levels of farm chemicals. A number of feed lots drain into the Sheyenne River Basin. The river's stream flow regime is highly regulated, primarily due to the upstream impoundment at Lake Ashtabula. There is no natural stream-flow regime on this stretch of the river.

### **Suitability Factor Number 2: Current status of landownership and use in the area including the amount of private land and the uses of such land.**

Landownership in the area is intermingled, with federal (U.S. Forest Service), state, and private landowners sharing river front. Public ownership on both sides of a river stretch is uncommon. The state owns the Sheyenne River corridor from high water mark to high water mark.

**Suitability Factor Number 3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed by designation and values that would be foreclosed or diminished if the area is not protected as part of the National Wild and Scenic River System.**

**Transportation**

No change in transportation along the river is anticipated should the stretch be designated. Recreational canoeing would still occur on a fairly frequent basis.

**Water**

Designation of this stretch of river may affect management of other watersheds along the Sheyenne River, especially upstream. Designation could affect upstream water usage, like storage, irrigation, and drainage.

**Minerals**

No change in minerals use is anticipated. No mining (including gravel) currently occurs within this stretch of the river. Although the Wild and Scenic Rivers Act does not prohibit mining within recreational river segments, no mining is expected under designation.

**Timber**

No change in management of the hardwood forest would be anticipated under designation.

**Fisheries and Wildlife**

Designation could enhance habitat for fisheries, mainly resulting from necessary adjustments to grazing systems along nearby tributaries (Iron Springs Creek and Berg Creek).

**Recreation, Scenic, and Subsistence**

No change in management for recreational, scenic, or subsistence purposes would be anticipated under designation. No campgrounds are found on this stretch of the river, and none would likely be planned. Trapping would not be prohibited under designation.

**Effects of Nondesignation**

Continued degradation of river banks from upstream uses would be anticipated without designation. Without designation, continued degradation along tributaries (Iron Springs Creek and Berg Creek) would also be anticipated.

**Suitability Factor Number 4: Public, state, and local government interests.**

The U.S. Corps of Engineers is developing an outlet for Devils Lake, a closed basin in northeastern North Dakota. The outlet would drain into the Sheyenne River. When completed, probably in the next few years, continued high flows along the Sheyenne River are anticipated. This increase in stream flow will likely increase degradation of the river's banks. Designation might affect how any future bridges built over this stretch of the Sheyenne River would be designed. Although scenic in nature, the Sheyenne River is not designated as a State Scenic River.

**Suitability Factor Number 5: Estimated costs of land acquisition and management as a Wild and Scenic River.**

The U.S. Forest Service may need to purchase about one mile of public easement along the river in order to restrict certain private uses of the land along the river. Cost is estimated at about \$20,000. A river management plan may also need to be written. Estimated cost to develop such a plan is \$10,000. In addition, signs identifying this stretch as a Wild and Scenic River might need to be completed. Annual management is estimated at about \$500. No land acquisitions are planned.